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## CLAIMS

1. Fischer-Tropsch process for the conversion of carbon monoxide and hydrogen to  $C_5^+$  hydrocarbon mixtures in which process use is made of Fischer-Tropsch catalyst particles and particles comprising zeolite Y with a water adsorption capacity (25°C,  $p/p_0=0.20$ ) of at least 16 wt% .
2. A process according to claim 1 wherein a reaction mixture of carbon monoxide and hydrogen is contacted with the Fischer-Tropsch catalyst particles and the particles comprising zeolite Y.
3. A process according to claim 2 wherein the Fischer-Tropsch catalyst particles and the particles comprising zeolite Y are dosed to the reaction mixture individually.
4. A process according to claim 3 wherein the Fischer-Tropsch catalyst particles and the particles comprising zeolite Y are dosed at different rates.
5. A process according to claim 2 wherein the Fischer-Tropsch catalyst particles and the particles comprising zeolite Y are used in the form of shaped bodies in which both particles are embedded.
6. A process according to claim 1 wherein the Fischer-Tropsch catalyst particles are used in the second step of the Fischer-Tropsch process and the particles comprising zeolite Y are used in the third step of the Fischer-Tropsch process.
7. A process according to any one of the preceding claims wherein the Fischer-Tropsch catalyst particles comprise iron.

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8. A process according to any one of the preceding claims wherein the Fischer-Tropsch catalyst particles comprise cobalt.
9. A process according to any one of the preceding claims wherein a metal  
5 compound has been deposited in or on the particles comprising zeolite Y.